

- 2. Get SELP ^{grants} members together and have them ^{compete} with industry ^{work on} NASA outsource ideas teams on project X
- 3. Can NASA work in the 20% dar time?
- 4. Can SBIR-type projects be more pfor bid NASA + company?



Graduation Day

1
00:00:07,040 --> 00:00:10,709
this week at nasa

2
00:00:15,669 --> 00:00:13,030
space shuttle atlantis remains on track

3
00:00:19,510 --> 00:00:15,679
for a july 8th launch the four-person

4
00:00:22,150 --> 00:00:19,520
crew of sts-135 commander chris ferguson

5
00:00:25,029 --> 00:00:22,160
pilot doug hurley mission specialists

6
00:00:27,189 --> 00:00:25,039
rex walheim and sandy magnus continues

7
00:00:31,029 --> 00:00:27,199
preparations for the final flight of

8
00:00:33,030 --> 00:00:31,039
nasa's space shuttle program

9
00:00:35,270 --> 00:00:33,040
to ready for the work they'll do on the

10
00:00:37,350 --> 00:00:35,280
international space station the crew

11
00:00:39,350 --> 00:00:37,360
trained in the neutral buoyancy lab at

12
00:00:41,110 --> 00:00:39,360
johnson space center and the kennedy

13
00:00:42,229 --> 00:00:41,120

space center's orbiter processing

14

00:00:43,990 --> 00:00:42,239

facility

15

00:00:46,150 --> 00:00:44,000

atlantis will carry the rafaello

16

00:00:48,630 --> 00:00:46,160

multi-purpose logistics module with

17

00:00:51,590 --> 00:00:48,640

about 17 000 pounds of supplies and

18

00:00:54,069 --> 00:00:51,600

spare parts to the iss largely it's a

19

00:00:56,630 --> 00:00:54,079

cargo mission it's an effort to posture

20

00:00:58,229 --> 00:00:56,640

the space station for about a year

21

00:01:00,389 --> 00:00:58,239

put it in a good position until we can

22

00:01:02,549 --> 00:01:00,399

get our commercial

23

00:01:04,950 --> 00:01:02,559

cargo resupply system up and running

24

00:01:08,149 --> 00:01:04,960

atlantis sits at the ready on launch pad

25

00:01:12,149 --> 00:01:08,159

39a after his external tank passed a

26

00:01:14,070 --> 00:01:12,159

pre-launch liquid propellant test

27

00:01:16,550 --> 00:01:14,080

this is the first time we really are

28

00:01:18,710 --> 00:01:16,560

pinpointing when these black holes were

29

00:01:20,710 --> 00:01:18,720

really forming and growing nasa's

30

00:01:23,190 --> 00:01:20,720

science mission directorate conducted

31

00:01:25,429 --> 00:01:23,200

two news conferences to update the media

32

00:01:27,830 --> 00:01:25,439

on progress and developments in the

33

00:01:29,030 --> 00:01:27,840

chandra x-ray observatory and messenger

34

00:01:31,270 --> 00:01:29,040

missions

35

00:01:33,350 --> 00:01:31,280

the first of the two provided a look at

36

00:01:35,749 --> 00:01:33,360

new pictures and data collected by

37

00:01:38,390 --> 00:01:35,759

chandra it took the research that was

38

00:01:40,469 --> 00:01:38,400

done over the last decade with chandra

39

00:01:42,870 --> 00:01:40,479

for people to begin to realize that you

40

00:01:44,950 --> 00:01:42,880

could by observing very deeply in the

41

00:01:47,030 --> 00:01:44,960

universe that you could piece together

42

00:01:49,270 --> 00:01:47,040

some of the very early history of black

43

00:01:51,749 --> 00:01:49,280

hole growth black holes are the last

44

00:01:54,230 --> 00:01:51,759

evolutionary stage in the lifetimes of

45

00:01:57,190 --> 00:01:54,240

stars there were once at least 10 to 15

46

00:01:59,910 --> 00:01:57,200

times as massive as our own sun

47

00:02:02,389 --> 00:01:59,920

these cold remnants are extremely dense

48

00:02:05,109 --> 00:02:02,399

exerting a gravitational pull so strong

49

00:02:08,229 --> 00:02:05,119

that nothing not even light can escape

50

00:02:09,669 --> 00:02:08,239

their grasp

51
00:02:11,510 --> 00:02:09,679
in many cases a lot of the original

52
00:02:13,990 --> 00:02:11,520
ideas about mercury are just plain wrong

53
00:02:16,949 --> 00:02:14,000
and so we're finding some surprises also

54
00:02:18,869 --> 00:02:16,959
revealed new images and science findings

55
00:02:20,630 --> 00:02:18,879
from the first spacecraft to orbit

56
00:02:23,110 --> 00:02:20,640
mercury we've gotten some very good

57
00:02:24,550 --> 00:02:23,120
fluorescent x-ray data from the surface

58
00:02:27,270 --> 00:02:24,560
so we're getting good measurements right

59
00:02:29,670 --> 00:02:27,280
now of the average composition of key

60
00:02:31,830 --> 00:02:29,680
elements like magnesium aluminum silicon

61
00:02:34,470 --> 00:02:31,840
sulfur calcium titanium and iron with

62
00:02:36,550 --> 00:02:34,480
this instrument nasa's mercury surface

63
00:02:38,710 --> 00:02:36,560

space environment geochemistry and

64

00:02:40,790 --> 00:02:38,720

ranging or messenger spacecraft

65

00:02:42,710 --> 00:02:40,800

completed more than a dozen laps through

66

00:02:44,869 --> 00:02:42,720

the inner solar system during the six

67

00:02:48,070 --> 00:02:44,879

years prior to achieving the historic

68

00:02:51,110 --> 00:02:48,080

orbit insertion on march 17th mercury

69

00:02:54,630 --> 00:02:51,120

really is a world in and of its own

70

00:02:57,190 --> 00:02:54,640

and we're finding that um just like the

71

00:02:59,190 --> 00:02:57,200

earth it's got its own personality

72

00:03:01,830 --> 00:02:59,200

uh mercury is one of the terrestrial

73

00:03:04,229 --> 00:03:01,840

planets and therefore provides some

74

00:03:06,149 --> 00:03:04,239

context for what was going on in the

75

00:03:08,229 --> 00:03:06,159

inner part of the solar system back when

76

00:03:10,790 --> 00:03:08,239

that the planets were condensing from

77

00:03:13,509 --> 00:03:10,800

the solar nebula messenger will image in

78

00:03:15,830 --> 00:03:13,519

stereo nearly the entire surface of

79

00:03:20,229 --> 00:03:15,840

mercury to determine the planet's global

80

00:03:25,509 --> 00:03:23,190

this video of the giant asteroid vesta

81

00:03:27,750 --> 00:03:25,519

was created by scientists working with

82

00:03:30,789 --> 00:03:27,760

nasa's dawn spacecraft highlighting

83

00:03:33,190 --> 00:03:30,799

vesta's jacket irregular shape the video

84

00:03:35,589 --> 00:03:33,200

loops 20 images dawn captured for

85

00:03:37,670 --> 00:03:35,599

navigation purposes as it approached

86

00:03:39,350 --> 00:03:37,680

this unexplored world in the main

87

00:03:41,750 --> 00:03:39,360

asteroid belt

88

00:03:43,350 --> 00:03:41,760

a dark feature near vesta's equator

89

00:03:45,750 --> 00:03:43,360

moves from left to right with the

90

00:03:47,830 --> 00:03:45,760

asteroid's rotation hinting at the

91

00:03:49,589 --> 00:03:47,840

enormous crater known to exist at

92

00:03:51,589 --> 00:03:49,599

vesta's south pole

93

00:03:58,470 --> 00:03:51,599

dawn is scheduled to begin orbiting the

94

00:04:03,190 --> 00:04:00,789

graduates of nasa's systems engineering

95

00:04:05,350 --> 00:04:03,200

leadership development program received

96

00:04:06,830 --> 00:04:05,360

their diplomas at a ceremony held at

97

00:04:09,910 --> 00:04:06,840

headquarters

98

00:04:11,910 --> 00:04:09,920

s-e-l-d-p accelerates and develops the

99

00:04:14,149 --> 00:04:11,920

leadership potential of mid-level

100

00:04:16,390 --> 00:04:14,159

systems engineers to help them better

101

00:04:18,949 --> 00:04:16,400

deal with difficult and multifaceted

102

00:04:21,270 --> 00:04:18,959

technical problems and intricate social

103

00:04:22,710 --> 00:04:21,280

systems the process of their learning

104

00:04:25,430 --> 00:04:22,720

experience over the year learning a lot

105

00:04:27,510 --> 00:04:25,440

about themselves and and how they can do

106

00:04:29,350 --> 00:04:27,520

a better job of leading teams and

107

00:04:31,830 --> 00:04:29,360

practicing both the art and the science

108

00:04:32,710 --> 00:04:31,840

of system engineering there was 20 of us

109

00:04:34,469 --> 00:04:32,720

in

110

00:04:35,510 --> 00:04:34,479

scldp

111

00:04:36,950 --> 00:04:35,520

and

112

00:04:38,790 --> 00:04:36,960

each of us came from different centers

113

00:04:39,510 --> 00:04:38,800

so there was a lot of mingling of ideas

114

00:04:40,790 --> 00:04:39,520

and

115

00:04:43,030 --> 00:04:40,800

cultures

116

00:04:46,070 --> 00:04:43,040

and i think we all grew from this the

117

00:04:48,550 --> 00:04:46,080

year-long program was initiated in 2008

118

00:04:50,870 --> 00:04:48,560

to ensure that nasa's workforce would be

119

00:04:53,749 --> 00:04:50,880

ready and able to lead the world in

120

00:04:56,390 --> 00:04:53,759

space exploration scientific discovery

121

00:04:58,870 --> 00:04:56,400

technology development and managerial

122

00:05:00,710 --> 00:04:58,880

excellence so we're quite excited about

123

00:05:02,150 --> 00:05:00,720

what these folks have done and

124

00:05:03,830 --> 00:05:02,160

very very excited about what they're

125

00:05:09,990 --> 00:05:03,840

going to do in their in their future at

126

00:05:15,110 --> 00:05:12,790

in an ear deafening twist of irony this

127

00:05:18,150 --> 00:05:15,120

supersonic aircraft is producing amped

128

00:05:22,790 --> 00:05:18,160

up super loud sonic booms to help make

129

00:05:27,670 --> 00:05:24,629

nasa researchers at the dryden flight

130

00:05:30,070 --> 00:05:27,680

research center laid out a two mile long

131

00:05:33,830 --> 00:05:30,080

string of microphones to record the

132

00:05:36,390 --> 00:05:33,840

thunder of an accelerating f a 18 jet

133

00:05:39,110 --> 00:05:36,400

for the super boom caustic analysis and

134

00:05:41,590 --> 00:05:39,120

measurement program or scamp

135

00:05:43,350 --> 00:05:41,600

scamp measured these focused booms to

136

00:05:45,909 --> 00:05:43,360

understand how to minimize their

137

00:05:48,550 --> 00:05:45,919

startling impact and ensure that

138

00:05:51,029 --> 00:05:48,560

tomorrow's supersonic jets will be quiet

139

00:05:58,150 --> 00:05:51,039

in all phases of flight over land

140

00:06:02,309 --> 00:06:00,230

glenn research center employees and

141

00:06:04,390 --> 00:06:02,319

visitors will soon be checking in

142

00:06:06,870 --> 00:06:04,400

through a new main entrance

143

00:06:09,749 --> 00:06:06,880

the new single single-story 2500 square

144

00:06:11,990 --> 00:06:09,759

foot structure main gate and its roadway

145

00:06:14,710 --> 00:06:12,000

called the nasa parkway will mark a

146

00:06:17,430 --> 00:06:14,720

milestone in a 20-year master plan to

147

00:06:19,830 --> 00:06:17,440

improve facilities and infrastructure at

148

00:06:22,870 --> 00:06:19,840

glenn's lewis field in cleveland and the

149

00:06:24,710 --> 00:06:22,880

plum brook station in sandusky ohio the

150

00:06:26,790 --> 00:06:24,720

event was celebrated with a special

151

00:06:30,150 --> 00:06:26,800

ribbon cutting ceremony it really

152

00:06:32,150 --> 00:06:30,160

isolates the processing of our visitors

153

00:06:33,670 --> 00:06:32,160

keeps them outside the security barrier

154

00:06:35,749 --> 00:06:33,680

helps our security guards with the

155

00:06:38,390 --> 00:06:35,759

traffic flow in and out of the center

156

00:06:40,790 --> 00:06:38,400

the new building will be gold certified

157

00:06:43,110 --> 00:06:40,800

as a high performance eco-friendly

158

00:06:45,110 --> 00:06:43,120

building by the u.s green building

159

00:06:50,629 --> 00:06:45,120

council leadership in energy and

160

00:06:54,710 --> 00:06:52,150

the ames research center's

161

00:06:57,830 --> 00:06:54,720

sustainability base has been named the

162

00:06:59,909 --> 00:06:57,840

government's green building of the year

163

00:07:02,150 --> 00:06:59,919

due to be completed later this summer

164

00:07:04,950 --> 00:07:02,160

the structure incorporates technology

165

00:07:06,790 --> 00:07:04,960

used by astronauts in space and will be

166

00:07:09,670 --> 00:07:06,800

one of only a few buildings in

167

00:07:11,510 --> 00:07:09,680

california generating more electricity

168

00:07:14,230 --> 00:07:11,520

than it consumes

169

00:07:16,150 --> 00:07:14,240

construction for sustainability base has

170

00:07:19,029 --> 00:07:16,160

been more expensive than a standard

171

00:07:21,589 --> 00:07:19,039

government facility but nasa expects its

172

00:07:26,629 --> 00:07:21,599

lower operating costs will offset the

173

00:07:32,390 --> 00:07:29,909

nasa 360 the tv program that highlights

174

00:07:35,029 --> 00:07:32,400

how nasa technology contributes to our

175

00:07:37,510 --> 00:07:35,039

daily lives was nominated for a national

176
00:07:39,589 --> 00:07:37,520
daytime emmy award for single camera

177
00:07:42,550 --> 00:07:39,599
television editor today nasa is in the

178
00:07:44,629 --> 00:07:42,560
process of testing nasa 360 is based at

179
00:07:46,629 --> 00:07:44,639
the langley research center and is

180
00:07:48,629 --> 00:07:46,639
produced for nasa by the national

181
00:07:51,350 --> 00:07:48,639
institute of aerospace

182
00:07:53,430 --> 00:07:51,360
besides nasa tv the half hour program is

183
00:07:56,469 --> 00:07:53,440
seen on select airlines

184
00:07:59,670 --> 00:07:56,479
cable free to air broadcast channels and

185
00:08:03,110 --> 00:07:59,680
450 public broadcasting service stations

186
00:08:03,120 --> 00:08:07,110
and now centerpieces

187
00:08:15,189 --> 00:08:09,189
good morning everybody and welcome to

188
00:08:20,790 --> 00:08:17,909

in the world of social media a tweet-up

189

00:08:23,350 --> 00:08:20,800

is a meet-up twitter users bloggers and

190

00:08:28,309 --> 00:08:23,360

other social media fans my twitter

191

00:08:35,029 --> 00:08:31,350

a nasa tweet of draws a special crowd

192

00:08:37,509 --> 00:08:35,039

i'm a science geek it's i'm not ashamed

193

00:08:40,550 --> 00:08:37,519

these space tweets got to rub elbows

194

00:08:43,829 --> 00:08:40,560

with nasa's scientists and engineers the

195

00:08:46,310 --> 00:08:43,839

ion thruster pushes on the spacecraft as

196

00:08:47,269 --> 00:08:46,320

hard as this piece of paper pushes on my

197

00:08:49,990 --> 00:08:47,279

hand

198

00:08:52,230 --> 00:08:50,000

and met legends like john cassani who

199

00:08:54,470 --> 00:08:52,240

worked on the cassini voyager and

200

00:08:56,310 --> 00:08:54,480

galileo missions

201
00:08:58,470 --> 00:08:56,320
it's so rewarding to all of us to see

202
00:09:01,030 --> 00:08:58,480
people like you who are excited and

203
00:09:03,509 --> 00:09:01,040
turned on by the products of what that

204
00:09:06,310 --> 00:09:03,519
comes out of here and get that message

205
00:09:07,509 --> 00:09:06,320
out to the people who support us sitting

206
00:09:09,509 --> 00:09:07,519
there every once in a while you're going

207
00:09:11,030 --> 00:09:09,519
i can't believe that people do this that

208
00:09:13,430 --> 00:09:11,040
we send things

209
00:09:15,590 --> 00:09:13,440
millions of miles out into space it's

210
00:09:16,949 --> 00:09:15,600
just incredible to be able to get it

211
00:09:18,230 --> 00:09:16,959
from the people who are actually doing

212
00:09:20,470 --> 00:09:18,240
it

213
00:09:23,269 --> 00:09:20,480

this tweet up drew more than a hundred

214

00:09:25,829 --> 00:09:23,279

tweets from 20 states and two foreign

215

00:09:28,230 --> 00:09:25,839

countries it impresses me how much the

216

00:09:30,550 --> 00:09:28,240

entire nasa staff is dedicated to

217

00:09:32,790 --> 00:09:30,560

outreach especially the way that nasa

218

00:09:35,670 --> 00:09:32,800

works with kids and creating new geeks

219

00:09:38,070 --> 00:09:35,680

and new scientists they blog they

220

00:09:41,030 --> 00:09:38,080

tweeted telling their followers

221

00:09:46,630 --> 00:09:44,389

having their pictures taken in 3d

222

00:09:48,790 --> 00:09:46,640

seeing mission control home of the deep

223

00:09:51,670 --> 00:09:48,800

space network

224

00:09:54,550 --> 00:09:51,680

the mars rover test bed

225

00:09:55,750 --> 00:09:54,560

and curiosity it's actually kind of sad

226

00:09:56,710 --> 00:09:55,760

because every time i come here it's like

227

00:09:57,990 --> 00:09:56,720

one of the last times we're gonna be

228

00:09:59,269 --> 00:09:58,000

able to look at it and then it goes to

229

00:10:01,110 --> 00:09:59,279

florida for a few more months and then

230

00:10:02,710 --> 00:10:01,120

november the day after thanksgiving is

231

00:10:04,710 --> 00:10:02,720

our is the opening of our launch window

232

00:10:07,190 --> 00:10:04,720

how has this space geek been enjoying

233

00:10:10,790 --> 00:10:07,200

this i'm in heaven this is my idea of

234

00:10:13,350 --> 00:10:10,800

summer camp it was a space exploration

235

00:10:15,829 --> 00:10:13,360

love fest there's almost too much great

236

00:10:17,990 --> 00:10:15,839

stuff here to do in a single day all

237

00:10:24,949 --> 00:10:18,000

very very tired but very very happy

238

00:10:30,389 --> 00:10:27,829

it's called star trek the exhibition and

239

00:10:32,630 --> 00:10:30,399

it's attracting both die hard fans and

240

00:10:35,190 --> 00:10:32,640

novices to the kennedy space center's

241

00:10:37,269 --> 00:10:35,200

visitor complex like the klingon to

242

00:10:39,509 --> 00:10:37,279

intergalactic mayhem

243

00:10:42,069 --> 00:10:39,519

the interactive exhibit showcases

244

00:10:45,110 --> 00:10:42,079

authentic star trek artifacts from the

245

00:10:47,350 --> 00:10:45,120

past 45 years including one-of-a-kind

246

00:10:49,590 --> 00:10:47,360

costumes props and displays from the

247

00:10:51,829 --> 00:10:49,600

popular 60s television show and

248

00:10:54,069 --> 00:10:51,839

subsequent feature films

249

00:10:56,389 --> 00:10:54,079

visitors are treated to a recreation of

250

00:10:58,630 --> 00:10:56,399

the original series starship enterprise

251

00:11:01,509 --> 00:10:58,640

bridge with a chance to occupy the

252

00:11:02,630 --> 00:11:01,519

command chair of captain james tiberius

253

00:11:04,949 --> 00:11:02,640

kirk

254

00:11:07,190 --> 00:11:04,959

also on hand are replicas of the

255

00:11:08,790 --> 00:11:07,200

engineering and sickbays from star trek

256

00:11:11,269 --> 00:11:08,800

the next generation

257

00:11:13,829 --> 00:11:11,279

star trek the exhibition also features

258

00:11:16,550 --> 00:11:13,839

interactive kiosks and rare photo

259

00:11:19,829 --> 00:11:16,560

opportunities

260

00:11:22,389 --> 00:11:19,839

and that's this week at nasa for more on